ABSTRACT

An algorithm for projecting information data belonging to a multidimensional space into a space having fewer dimensions, a method for the cognitive analysis of multidimensional information data based on said algorithm, and a program comprising said algorithm stored on a recordable support. An algorithm for projecting information data belonging to a multidimensional space into a space having fewer dimensions including the following steps: Providing a database of N-dimensional data in the form of records having a certain number of variables; Defining a metric function for calculating a distance between each record of the database; Calculating a matrix of distances between each record of the database by means of the metric function defined at the previous step; Defining a n-1 dimensional space in which each record is defined by n-1 coordinates; Calculating the n-1 coordinates of each record in the n-1 dimensional space by means of an evolutionary algorithm; Defining as the best projection of the records onto the n-1 dimensional space the projection in which the distance matrix of the records in the n-1 dimensional space best fits or has minimum differences with the distance matrix of the records calculated in the n-dimensional space. The method and the program apply the aforementioned algorithm.